

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 34

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte PAUL H. MAUPIN

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Appeal No. 95-0285  
Application No. 07/648,586<sup>1</sup>

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HEARD: March 2, 1998

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Before WINTERS, SOFOCLEOUS and GRON, Administrative Patent Judges.

WINTERS, Administrative Patent Judge.

DECISION ON APPEAL

This appeal was taken from the examiner's decision rejecting claims 1 through 14, 16 and 18 through 23, which are all of the claims remaining in the application. At the oral hearing on March 2, 1998, counsel expressed appellant's intention to withdraw claim 11 from the appeal, and this has been confirmed in

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<sup>1</sup> Application for patent filed January 31, 1991.

Appeal No. 95-0285  
Application No. 07/648,586

Paper No. 33, filed March 3, 1998. Accordingly, the appeal with respect to claim 11 is dismissed, leaving claims 1 through 10, 12 through 14, 16 and 18 through 23 for our consideration.

Claims 1, 10, 12 and 19 are representative:

1. An assay kit for identifying periodontal disease in a patient, said disease correlated to elevated levels of aspartate aminotransferase (AST) in a crevicular fluid sample from the patient, which kit comprises an enclosure containing:

an aliquot of a buffered aqueous solution of cysteine sulfinic acid (CSA) provided in a container for said aliquot;

a plurality of solid indicator supports each comprising a triarylmethine dye affixed to a solid matrix, said dye reactive with sulfite ion and nonreactive with both CSA and AST; and

an assay plate provided with a plurality of wells, each well defining a volume sufficient to hold one of said solid indicator supports and a portion of the CSA solution adequate to perform at least one assay. [Emphasis added.]

10. An assay kit for identifying a disease correlated to elevated levels of aspartate aminotransferase (AST) in a bodily fluid sample from a patient, which kit comprises an enclosure containing:

an aliquot of a buffered aqueous solution of cysteine sulfinic acid (CSA) provided in a container for said aliquot; and

an assay plate defining a plurality of assay wells, said assay wells containing a triarylmethine dye that is reactive with sulfite ion but nonreactive with CSA and AST, each of said assay wells defining a volume sufficient to hold the fluid sample and a portion of the CSA solution adequate to perform at least one assay. [Emphasis added.]

12. A method for determining the amount of aspartate aminotransferase (AST) in a body fluid sample from a mammal, which method comprises:

Appeal No. 95-0285  
Application No. 07/648,586

contacting, under AST reacton [sic] conditions, a body fluid sample from the mammal with cysteine sulfinic acid (CSA) in the presence of a triarylmethine dye nonreactive with both AST and CSA for a period of time sufficient for at least some of said CSA to be converted to sulfite ions that react with said triarylmethine dye to form a signal species; and

determining the amount of signal species formed, and thereby the amount of AST in said sample. [Emphasis added.]

19. A method for detecting an AST-related disease in a patient comprising contacting a fluid sample from the patient with cysteine sulfinic acid (CSA) in the presence of a triarylmethine dye that is nonreactive with both CSA and the fluid sample, and detecting reaction of said triarylmethine dye. [Emphasis added.]

The references relied on by the examiner are:

Babler et al. (Babler)	4,801,535	Jan. 31, 1989
Baram	4,981,787	Jan. 1, 1991
Staple et al. (Staple)	5,039,619	Aug. 13, 1991

(filed Sept. 20, 1989)

The issue presented for review is whether the examiner erred in rejecting all of the appealed claims under 35 U.S.C. § 103 as unpatentable over the combined disclosures of Baram, Staple and Babler.

On consideration of the record, we reverse the examiner's prior art rejection. The claimed assay kit requires, as an essential component, cysteine sulfinic acid (CSA) and the claimed method requires CSA as an essential reagent. Manifestly, the prior art relied on by the examiner is insufficient to support a conclusion of obviousness of claims reciting CSA. Neither Baram nor Staple nor Babler discloses or suggests the use of CSA.

Appeal No. 95-0285  
Application No. 07/648,586

Therefore, the cited prior art, regardless how viewed, would not have led a person having ordinary skill in the art to the claimed subject matter.

The appeal with respect to claim 11 is dismissed.

The examiner's decision rejecting claims 1 through 10, 12 through 14, 16 and 18 through 23 is reversed.

REVERSED

SHERMAN D. WINTERS	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
MICHAEL SOFOCLEOUS	)	BOARD OF PATENT
Administrative Patent Judge	)	APPEALS AND
	)	INTERFERENCES
	)	
	)	
TEDDY S. GRON	)	
Administrative Patent Judge	)	

Appeal No. 95-0285  
Application No. 07/648,586

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